## REMARKS

This Application has been carefully reviewed in light of the Final Office Action mailed December 27, 2004. At the time of the Final Office Action, Claims 18-28 were pending in this Application. Claims 18-28 were rejected. Claims 18-28 have been amended to further define various features of Applicants' invention. Applicants respectfully request reconsideration and favorable action in this case.

## Rejections under 35 U.S.C. § 101

Claims 18-28 were rejected by the Examiner under 35 U.S.C. §101, for failing to support the claimed invention by either a specific asserted utility or a well established utility. Applicants traverse the rejection and submit Claims 18-28 meet the requirements of 35 U.S.C. §101 and that the Examiner has failed to establish a *prima facie* showing that the claimed invention lacks utility.

To properly reject a claimed invention under 35 U.S.C. §101, the Examiner must (a) make a prima facie showing that the claimed invention lacks utility, and (b) provide a sufficient evidentiary basis for factual assumptions relied upon in establishing the prima facie showing. In re Gaubert, 524 F.2d 1222,1224 (CCPA 1975) ("Accordingly, the PTO must do more than merely question operability — it must set forth factual reasons which would lead one skilled in the art to question the objective truth of the statement of operability.") See also MPEP § 2107.02 IV (p. 2100-40 and 2100-41). Indeed, "[i]f examination at the initial stage does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of the patent." In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992). As detailed below, it is respectfully submitted that a prima facie showing that the claimed inventions lack utility has not been made.

Independent Claims 18, 23 and 25 are directed, *inter alia*, to a modem for symmetric bi-directional transporting of 100BaseTX Ethernet over a telecommunications copper infrastructure as shown in Figure 4 of the present application. The number of DSL-ports in the modem is variable, *i.e.*, these can be between one to four DSL-ports. Consequently, the modem according to the present invention is configurable to handle a variable number of DSL-ports. Each DSL-port has connected thereto a corresponding copper twisted pair wire

as expressed in the third sub-paragraph of pending Independent Claim 18, the eighth subparagraph of Independent Claim 23, and the fifth sub-paragraph of Independent Claim 26. Since the number of copper twisted pair wires provided in a given infrastructure is restricted, it is useful to have a modem wherein the number of DSL-ports and therefore, the number of occupied twisted pair wires is configurable. For instance, when using several modems according to the present invention as claimed, e.g., in Claim 18, a first modern might only have one DSL-port to transmit a 25MBPS data upstream signal and to receive a 25MBPS downstream signal and another modem according to the present invention might be configured to have four DSL-ports to exchange data at the rate of 100MBPS. configuration of the different modems is performed according to the respective requirements of the application. For instance, one application running on a computer which is connected to a first modem has only a data rate of 25MBPS, whereas another application running on another computer connected to a second modem needs a data exchange rate of 100MBPS. In the given example, 4 + 1 = 5 DSL-ports and therefore, 5 copper twisted pair wires are occupied when the first modem exchanges data at a rate of 25MBPS and the second modem exchanges data at a rate of 100MBPS. However, two modems each having four DSL-ports running at data rate of 25MBPS would occupy 2 x 4 = 8 copper twisted pair wires. It is submitted, for the reasons stated above, that the subject matter claimed by Claims 18-28 have a well established utility. Applicant requests withdrawal of the rejection.

## Rejections under 35 U.S.C. § 112

Claims 18-28 were rejected by the Examiner under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Applicants traverse the rejection and submit Claims 18-28 are in full compliance with 35 U.S.C. § 112. The modems as claimed by pending Independent Claims 18, 23 and 26 are described in detail with respect to Figure 4 of the present application on page 15, line 4 to page 17, line 18 of the original specification. The "data splitter" is labeled "190" and the "data collection and reorganization unit" is labeled "192." The technical teachings of the specification enable a person of ordinary skill in the art to make such a modem. As described on page 15 of the present application, the

data splitter "190" divides a single data stream into one to four separate output data streams via a technique known as "inverse multiplexing". "Inverse multiplexing" is a known and understood technique for data splitting, for example, "spreading a single high data rate signal over several lower data rate channels to achieve a high data rate at the 100BaseS output." (See Specification at page 15.) The data collection and reorganization unit "192" receives data from up to four DSL-Ethernet ports via control data lines "204" and assembles the one or more data streams into a single data stream. Applicant submits said technical description is more than sufficient to enable a person of ordinary skill in the art to practice the subject matter of Independent Claims 18, 23, 26, and their dependents. If necessary, Applicant may submit an affidavit attesting to the sufficiency of the disclosure. Applicant requests withdrawal of the rejection.

## CONCLUSION

Applicants have now made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. Applicants respectfully request reconsideration of the claims as amended.

Applicants believe there are no fees due at this time, however, the Commissioner is hereby authorized to charge any fees necessary or credit any overpayment to Deposit Account No. 02-0383 of Baker Botts L.L.P.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512.322.2606.

Respectfully submitted, BAKER BOTTS L.L.P.

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